

Wetland and Storm Pond Management Alternatives for a Sustainable Shoreview



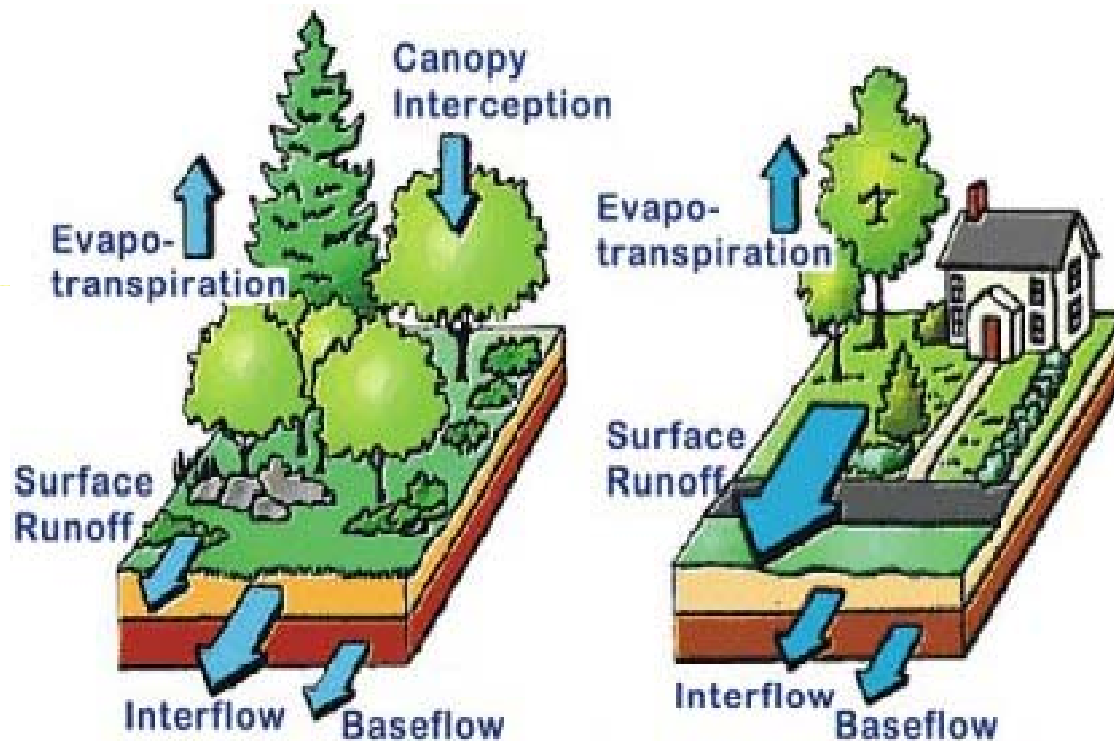
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Study Goals

- Develop an Understanding of Shoreview's Wetlands
- Develop an Understanding of the Current Social Behavior
- Inventory Current Wetland Policies
- Provide Recommendations
- Support and Encourage Sustainable Behavior



Hydrologic Cycle



It's not the destination,
it's all about the journey

Surface Water Runoff

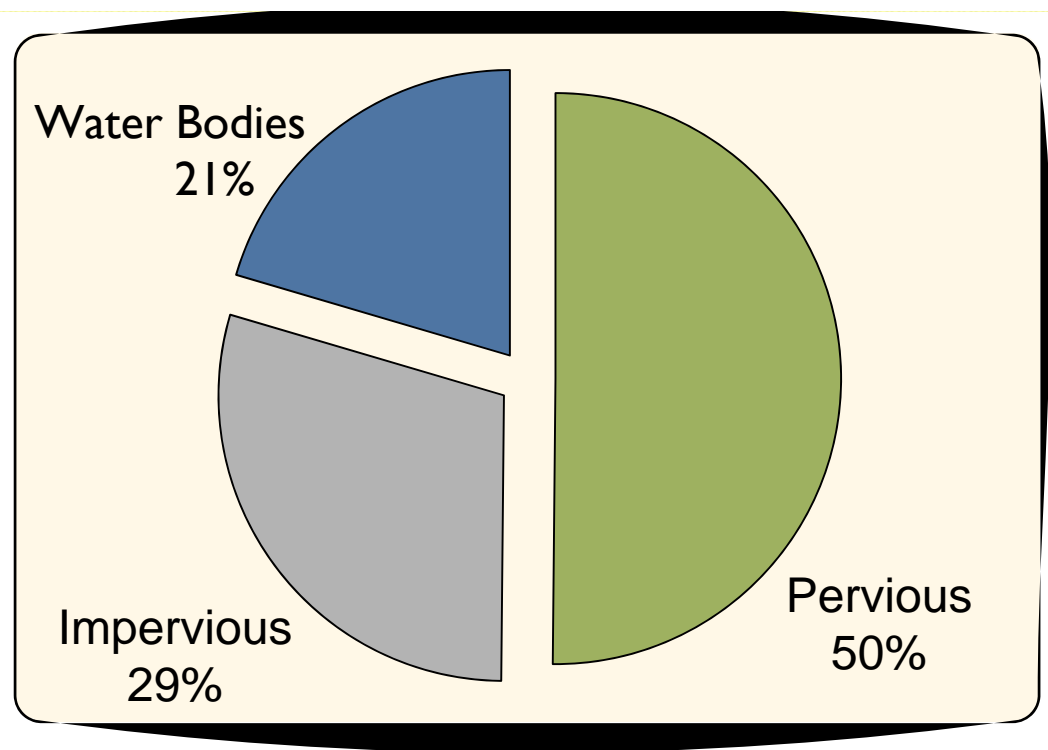
Impervious Surfaces

- Non-Point Source Pollution
 - Oil
 - Fertilizers
 - Pesticides
 - Trash

→ Sedimentation

→ Algae Blooms

Shoreview Land Cover





Methodology

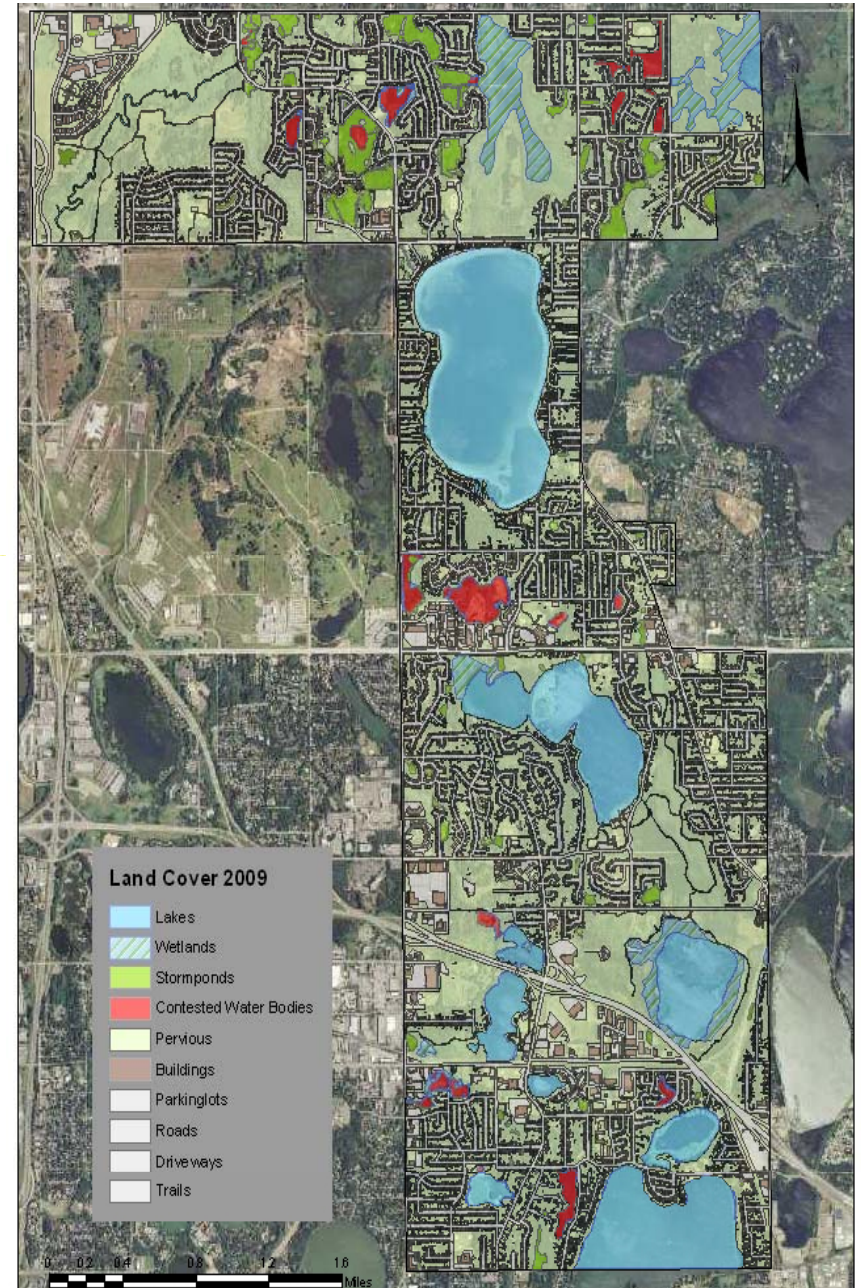
Expert Interviews and Secondary Sources

- City Officials
- GIS Experts
- Wetland Management Guides
- Surface Water Runoff Plans
- Storm water Management Plans
- Federal, State, Regional, and Municipal Policies

Methodology

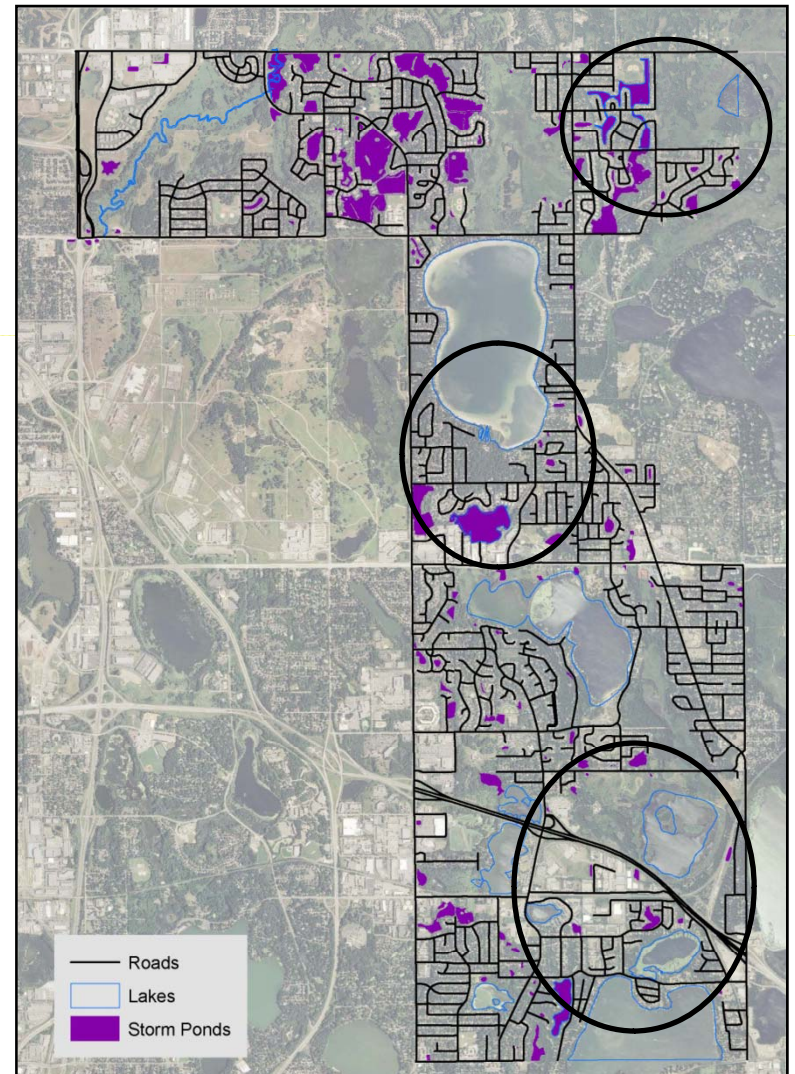
MAPS

- Wetlands
- Wetlands Management
- Development
- Land Cover



Resident Surveys

- Randomly selected Shoreview residents
 - Involvement
 - Knowledge level
 - Concerns
 - Issues



Findings

- Comprehensive wetland management policies are in place
- Majority of residents are concerned about wetland management
- Residents actions are well intended



Findings

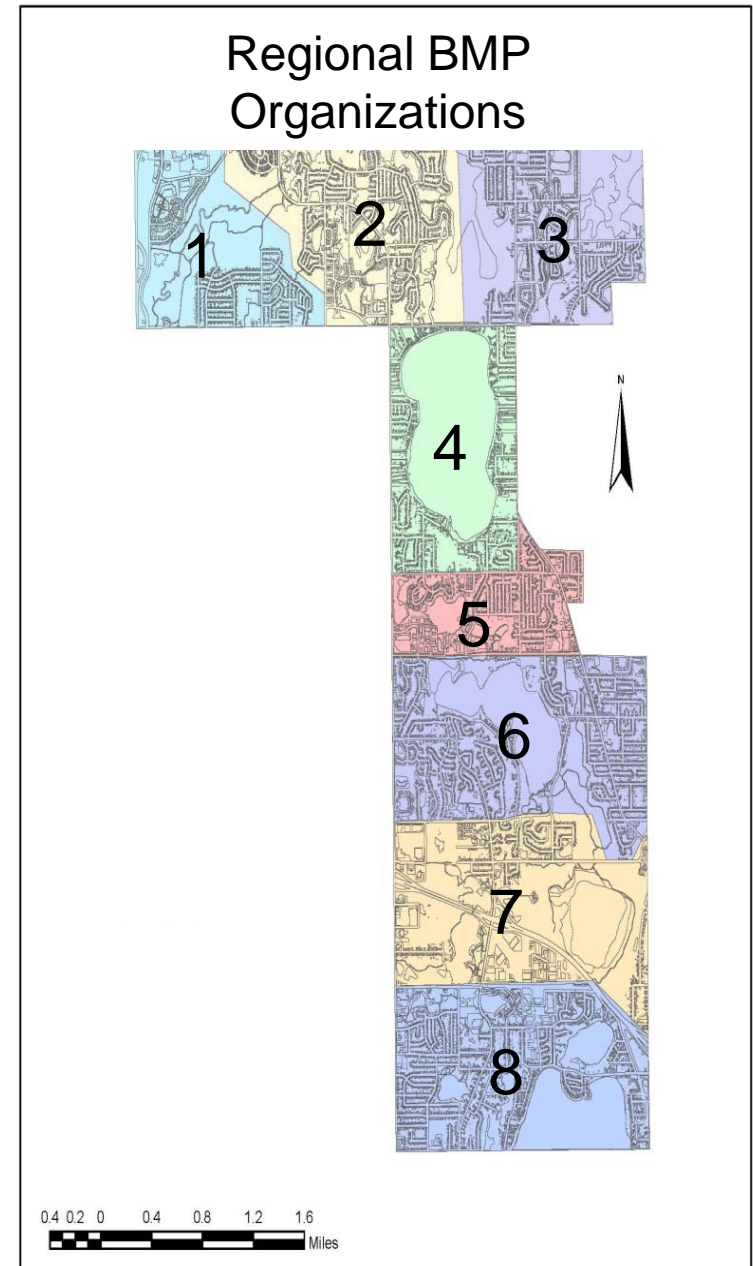
- Wetland and storm pond management requires a shared responsibility
- Residents and city staff do not have a shared vision of the use and responsibility of storm ponds
- There is potential within City ordinances to create enforceable and effective environmental standards



Recommendation I

Support Community Based Education for Surface Water Runoff

- Promote Regional Organizations
- Best Management Practices to Effect Daily Choices
- Cost Effective
- Long Term Solutions



Recommendation 2

Create a wetland collaboration program for city officials and staff

- Current Conditions
- Non Point Source Pollution
- BMP's
- Informants



Recommendation 3

Addition of water quality intern



Recommendation 4

Supplement existing environmental standards

- 209.060 Storm Water
- 209.070 Wetlands
- 209.090 Shore Land





In Conclusion

- Our recommendations focus on guiding residents choices and providing you with the tools to sustainably the wetlands that are so important to all of us.



Thank you!

Questions?